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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,859	06/28/2001	Ichiro Nakano	Q65181	3129

7590 04/23/2003

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
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Washington, DC 20037

EXAMINER
BISSETT, MELANIE D

ART UNIT	PAPER NUMBER
1711	4

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Applicati n No.	Applicant(s)	
	09/892,859	NAKANO ET AL.	
	Examin r	Art Unit	
	Melanie D. Bissett	1711	

-- Th MAILING DATE of this communication appears on th cover sh t with th corr spond nce addr ss --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 February 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. The rejections based on 35 USC 102 and 103 have been withdrawn based on the applicant's amendments. However, new rejections based on 35 USC 103 have been added as necessitated by amendment.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-3 and 5-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dai Nippon in view of Lee.

4. From a prior Office action:

> 4. Dai Nippon discloses a laminated structure having a heat sealant layer and an antistatic layer, which may be adhered to a container for electric devices (abstract; p. 2 lines 5-9). A preferred embodiment teaches a laminate comprising a base layer, an adhesive layer, an intermediate layer, a heat sealant layer, and an antistatic layer, in order (p. 3 lines 28-40). The adhesive layer (teaching a base layer of the present invention) can comprise a urethane resin (p. 4 lines 55-57) and has a thickness of 0.5-80 μm. The heat sealant layer is an adhesive layer that may be hot-melt or pressure-sensitive adhesive (p. 6 lines 13-18; p. 10 lines 28-29). The antistatic layer is deposited on the heat sealant layer and contains a semiconductor as a principal component, where the antistatic layer can be as thin as 0.01 μm (p. 11 lines 27-35) and has a surface resistivity of 10^5-10^{12} Ω/□ (p. 17 lines 34-35). Materials for the substrate resin film include PET, PEN, nylon, and polyolefins, all cited by the applicant as substrate materials; the reference notes several substrate materials having melting points higher than 90 °C. A preferred intermediate layer contains polyolefin materials (p. 18 lines 7-15). All working examples show light transmissivities above 60% (Tables 1-5 and 1-7).
>
> 5. In another preferred embodiment, an antistatic layer is applied to the rear surface of the substrate, where antistatic agents in the layer include copper, iron, aluminum, nickel or gold metal particles (p. 22 lines 23-35). The surface resistivity of this antistatic layer is also 10^5-10^{12} Ω/□ (p. 22 lines 54-56).
>
> 9. It is thought that the frictional electrification voltage properties would relate to the antistatic properties of the film. Because the reference teaches methods of reducing static to form surfaces

having the same surface resistivity properties as those claimed by the applicant, it is the examiner's position that the adhesive surface would also inherently possess the applicant's frictional electrification voltage properties. Also, since the reference teaches a variety of materials and layer structures to optimize antistatic properties, it is the examiner's position that it would have been prima facie obvious to form a cover tape having a frictional electrification voltage of less than 3,000 V to further optimize antistatic properties of the film.

5. Dai Nippon teaches that antistatic layers are formed by mixing an antistatic agent with a thermoplastic resin and using extrusion coating, melt extrusion coating, calendar coating, roll coating, or spraying processes to apply the layer (p. 11 lines 27-30. However, a deposition or vacuum deposition process is not noted. Lee teaches vacuum coating as a coating method used in microelectronics to prevent pinholes and porosity found in conventional spread coating techniques (pp. 601-602). Polymeric coatings to be vacuum deposited include those using PTFE, polyethylene, nylon, polyesters, polystyrene, and other thermoplastics (pp. 603, 608-609). Thus, it is the examiner's position that it would have been prima facie obvious to use a vacuum deposition method by the teaching of Lee to provide cover tapes for electric devices having improved appearance due to prevention of pinholes and porosity.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dai Nippon in view of Hsu et al. as applied to claims 1-3 and 5-15 above, and further in view of Temin. Note: "Temin" refers to the reference previously referred to as *Encyclopedia of Polymer Science and Engineering*. Samuel C. Temin is listed as the author or editor of the section "Pressure-Sensitive Adhesives and Products" in Vol. 13 of the noted encyclopedia.

7. From a prior Office action:

11. Dai Nippon applies as above, noting the use of several pressure sensitive adhesive (PSA) materials but failing to mention the inclusion of a base polymer and a tackifier in specific amounts. *Encyclopedia of Polymer Science and Engineering* teaches that all rubber-based adhesives require tackifiers to impart stickiness (p. 347). Rubber-based adhesives comprise 60-110 parts per 100 parts of elastomer, while acrylic PSAs do not require as much. Since Dai Nippon suggests the use of rubber- and acrylic-based PSAs, it is the examiner's position that it would have been prima facie obvious to include a tackifier in the base resins in any amount necessary to optimize the tack of the adhesive.

Response to Arguments

8. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

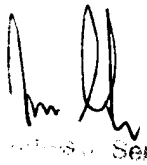
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie D. Bissett whose telephone number is (703) 308-6539. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (703) 308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

mdb
April 16, 2003



Seidleck
Patent Examiner
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